SHSAT Daily Mistake #6

The Percent-Change Base Trap

Rising Grade 8 math word-problem mini-lesson

Parent note

Give this as a 6-minute check. The goal is to make the student name the base for each percent before computing.

Question

A price increases by 20%, then decreases by 25% from the new price. The final price is \$90. What was the original price?

(A) \$75

(B) \$90

(C) \$100

(D) \$120

Answer and explanation

Correct answer: C

Let the original price be x. After the 20% increase, the price is 1.20x. A 25% decrease from that new price means multiply by 0.75, so the final price is $0.75 \times 1.20x = 0.90x$. If $0.90x = 90$, then $x = 100$.

Common wrong move: treating the 20% increase and 25% decrease as if they are taken from the same starting amount.

Next step

If this was hard, use the free SHSAT weak-spot tracker after the next practice set. If you need a full ELA + Math baseline, use the \$1.99 diagnostic.

originalpracticelab.com/shsat-percent-change-base-trap